EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	3172	fructosyltransferase$1 or fructosyl adj transferase$1 or $sucrase	US-PGPUB; USPAT	OR	OFF	2006/12/05 13:53
L2	7955	(lactobacillus or lactic adj acid adj bacteri$8)	US-PGPUB; USPAT	OR	OFF	2006/12/05 13:54
L3	251	(fructan or levan) near5 (mak$6 or produc$8 or synthes$8)	US-PGPUB; USPAT	OR	OFF	2006/12/05 13:57
L4	47	2 same (1 or 3)	US-PGPUB; USPAT	OR	OFF	2006/12/05 13:58

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* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:03:15 ON 05 DEC 2006

=> fil .bec,fsta
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         2.10       2.10

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
       ESBIOBASE, BIOTECHNO, WPIDS, FSTA' ENTERED AT 15:09:00 ON 05 DEC 2006
ALL COPYRIGHTS AND RESTRICTIONS APPLY.  SEE HELP USAGETERMS FOR DETAILS.

12 FILES IN THE FILE LIST

=> s fructosyltransferase# or fructosyl transferase# or levansucrase# or
levan(w)sucrase#
FILE 'MEDLINE'
            188 FRUCTOSYLTRANSFERASE#
            268 FRUCTOSYL
          59620 TRANSFERASE#
             20 FRUCTOSYL TRANSFERASE#
                  (FRUCTOSYL(W)TRANSFERASE#)
            266 LEVANSUCRASE#
            447 LEVAN
           3165 SUCRASE#
             17 LEVAN(W)SUCRASE#
L1          459 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'SCISEARCH'
            361 FRUCTOSYLTRANSFERASE#
            366 FRUCTOSYL
          47514 TRANSFERASE#
            107 FRUCTOSYL TRANSFERASE#
                  (FRUCTOSYL(W)TRANSFERASE#)
            352 LEVANSUCRASE#
            500 LEVAN
           1990 SUCRASE#
             10 LEVAN(W)SUCRASE#
L2          735 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'LIFESCI'
            129 FRUCTOSYLTRANSFERASE#
            115 "FRUCTOSYL"
          14962 TRANSFERASE#
             27 FRUCTOSYL TRANSFERASE#
                  ("FRUCTOSYL"(W)TRANSFERASE#)
            190 LEVANSUCRASE#
            291 LEVAN
            391 SUCRASE#
              8 LEVAN(W)SUCRASE#
L3          323 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'BIOTECHDS'
            485 FRUCTOSYLTRANSFERASE#
            214 FRUCTOSYL
           4231 TRANSFERASE#
            122 FRUCTOSYL TRANSFERASE#
                  (FRUCTOSYL(W)TRANSFERASE#)
            572 LEVANSUCRASE#
            228 LEVAN
```

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            108 SUCRASE#
             12 LEVAN(W)SUCRASE#
L4          742 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'BIOSIS'
            379 FRUCTOSYLTRANSFERASE#
            511 FRUCTOSYL
          79761 TRANSFERASE#
            162 FRUCTOSYL TRANSFERASE#
                  (FRUCTOSYL(W)TRANSFERASE#)
            334 LEVANSUCRASE#
            811 LEVAN
           3576 SUCRASE#
             94 LEVAN(W)SUCRASE#
L5          840 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'EMBASE'
            158 FRUCTOSYLTRANSFERASE#
            155 "FRUCTOSYL"
          43678 TRANSFERASE#
             11 FRUCTOSYL TRANSFERASE#
                  ("FRUCTOSYL"(W)TRANSFERASE#)
            254 LEVANSUCRASE#
            452 LEVAN
           2040 SUCRASE#
              8 LEVAN(W)SUCRASE#
L6          389 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'HCAPLUS'
            962 FRUCTOSYLTRANSFERASE#
            754 FRUCTOSYL
          55901 TRANSFERASE#
            134 FRUCTOSYL TRANSFERASE#
                  (FRUCTOSYL(W)TRANSFERASE#)
            716 LEVANSUCRASE#
           1338 LEVAN
           3789 SUCRASE#
            147 LEVAN(W)SUCRASE#
L7         1565 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'NTIS'
              2 FRUCTOSYLTRANSFERASE#
              2 FRUCTOSYL
           1385 TRANSFERASE#
              0 FRUCTOSYL TRANSFERASE#
                  (FRUCTOSYL(W)TRANSFERASE#)
              3 LEVANSUCRASE#
             16 LEVAN
             23 SUCRASE#
              0 LEVAN(W)SUCRASE#
L8            4 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'ESBIOBASE'
            167 FRUCTOSYLTRANSFERASE#
            175 FRUCTOSYL
          37141 TRANSFERASE#
             42 FRUCTOSYL TRANSFERASE#
                  (FRUCTOSYL(W)TRANSFERASE#)
            156 LEVANSUCRASE#
            196 LEVAN
```

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            572 SUCRASE#
              5 LEVAN(W)SUCRASE#
L9          345 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'BIOTECHNO'
            124 FRUCTOSYLTRANSFERASE#
            106 FRUCTOSYL
          16723 TRANSFERASE#
             29 FRUCTOSYL TRANSFERASE#
                   (FRUCTOSYL(W)TRANSFERASE#)
            201 LEVANSUCRASE#
            223 LEVAN
            493 SUCRASE#
              4 LEVAN(W)SUCRASE#
L10         318 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'WPIDS'
            352 FRUCTOSYLTRANSFERASE#
            279 FRUCTOSYL
           7276 TRANSFERASE#
            146 FRUCTOSYL TRANSFERASE#
                   (FRUCTOSYL(W)TRANSFERASE#)
            403 LEVANSUCRASE#
            225 LEVAN
            179 SUCRASE#
             31 LEVAN(W)SUCRASE#
L11         533 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

FILE 'FSTA'
             80 FRUCTOSYLTRANSFERASE#
            124 FRUCTOSYL
           2571 TRANSFERASE#
             36 FRUCTOSYL TRANSFERASE#
                   (FRUCTOSYL(W)TRANSFERASE#)
            118 LEVANSUCRASE#
            178 LEVAN
            112 SUCRASE#
              5 LEVAN(W)SUCRASE#
L12         214 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W)SUCRASE#

TOTAL FOR ALL FILES
L13        6467 FRUCTOSYLTRANSFERASE# OR FRUCTOSYL TRANSFERASE# OR LEVANSUCRASE#
                 OR LEVAN(W) SUCRASE#

=> s lactobacillus or lactic acid bacteri?
FILE 'MEDLINE'
           13824 LACTOBACILLUS
           35191 LACTIC
         1438303 ACID
          761188 BACTERI?
            2745 LACTIC ACID BACTERI?
                   (LACTIC(W)ACID(W)BACTERI?)
L14        14887 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'SCISEARCH'
           13324 LACTOBACILLUS
           27935 LACTIC
         1169234 ACID
          375921 BACTERI?
            8392 LACTIC ACID BACTERI?
                   (LACTIC(W)ACID(W)BACTERI?)
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L15      17331 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'LIFESCI'
          6913 LACTOBACILLUS
          8328 "LACTIC"
        309336 "ACID"
        198513 BACTERI?
          3305 LACTIC ACID BACTERI?
                 ("LACTIC"(W)"ACID"(W)BACTERI?)
L16       8687 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'BIOTECHDS'
          3085 LACTOBACILLUS
          6167 LACTIC
        143603 ACID
        128380 BACTERI?
          3239 LACTIC ACID BACTERI?
                 (LACTIC(W)ACID(W)BACTERI?)
L17       4242 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'BIOSIS'
         18897 LACTOBACILLUS
         31824 LACTIC
       1286833 ACID
       1387042 BACTERI?
          6792 LACTIC ACID BACTERI?
                 (LACTIC(W)ACID(W)BACTERI?)
L18      22481 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'EMBASE'
         10846 LACTOBACILLUS
         40817 "LACTIC"
       1438893 "ACID"
        500802 BACTERI?
          2810 LACTIC ACID BACTERI?
                 ("LACTIC"(W)"ACID"(W)BACTERI?)
L19      12137 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'HCAPLUS'
         24355 LACTOBACILLUS
        100720 LACTIC
       4252847 ACID
        607270 BACTERI?
         11476 LACTIC ACID BACTERI?
                 (LACTIC(W)ACID(W)BACTERI?)
L20      30903 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'NTIS'
           117 LACTOBACILLUS
           587 LACTIC
         44153 ACID
         18878 BACTERI?
            35 LACTIC ACID BACTERI?
                 (LACTIC(W)ACID(W)BACTERI?)
L21        134 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'ESBIOBASE'
          5324 LACTOBACILLUS
          7183 LACTIC
        361191 ACID
        213669 BACTERI?
          2907 LACTIC ACID BACTERI?
                 (LACTIC(W)ACID(W)BACTERI?)
L22       6827 LACTOBACILLUS OR LACTIC ACID BACTERI?
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FILE 'BIOTECHNO'
          5010 LACTOBACILLUS
          8347 LACTIC
        349810 ACID
        190625 BACTERI?
          2123 LACTIC ACID BACTERI?
                 (LACTIC(W)ACID(W)BACTERI?)
L23       6064 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'WPIDS'
          5370 LACTOBACILLUS
         22163 LACTIC
       1067260 ACID
        120624 BACTERI?
          2837 LACTIC ACID BACTERI?
                 (LACTIC(W)ACID(W)BACTERI?)
L24       7231 LACTOBACILLUS OR LACTIC ACID BACTERI?

FILE 'FSTA'
         10819 LACTOBACILLUS
         16788 LACTIC
        125602 ACID
         68224 BACTERI?
          7758 LACTIC ACID BACTERI?
                 (LACTIC(W)ACID(W)BACTERI?)
L25      15460 LACTOBACILLUS OR LACTIC ACID BACTERI?

TOTAL FOR ALL FILES
L26     146384 LACTOBACILLUS OR LACTIC ACID BACTERI?

=> s (fructan or levan)(5a)(mak###### or produc? or synthes?)
FILE 'MEDLINE'
           261 FRUCTAN
           447 LEVAN
        325926 MAK######
       1350938 PRODUC?
        523441 SYNTHES?
L27        180 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'SCISEARCH'
           772 FRUCTAN
           500 LEVAN
        389770 MAK######
       1923821 PRODUC?
        948230 SYNTHES?
L28        348 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'LIFESCI'
           161 FRUCTAN
           291 LEVAN
         57744 MAK######
        537827 PRODUC?
        146669 SYNTHES?
L29        187 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'BIOTECHDS'
           112 FRUCTAN
           228 LEVAN
         13994 MAK######
        231546 PRODUC?
         35304 SYNTHES?
L30        180 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'BIOSIS'
           967 FRUCTAN
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```
          811 LEVAN
       212367 MAK######
      1784928 PRODUC?
       669118 SYNTHES?
L31       492 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'EMBASE'
          434 FRUCTAN
          452 LEVAN
       298083 MAK######
      1291315 PRODUC?
       639817 SYNTHES?
L32       158 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'HCAPLUS'
         1359 FRUCTAN
         1338 LEVAN
       709131 MAK######
      4381278 PRODUC?
       975983 PRODN
      4852006 PRODUC?
                (PRODUC? OR PRODN)
      1579520 SYNTHES?
L33       720 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'NTIS'
            3 FRUCTAN
           16 LEVAN
       124660 MAK######
       375072 PRODUC?
        42988 SYNTHES?
L34          4 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'ESBIOBASE'
          387 FRUCTAN
          196 LEVAN
        83424 MAK######
       629745 PRODUC?
       210536 SYNTHES?
L35       208 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'BIOTECHNO'
          228 FRUCTAN
          223 LEVAN
        34859 MAK######
       394590 PRODUC?
       170699 SYNTHES?
L36       136 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'WPIDS'
          198 FRUCTAN
          225 LEVAN
       711907 MAK######
      2466991 PRODUC?
       149942 SYNTHES?
L37        81 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

FILE 'FSTA'
          194 FRUCTAN
          178 LEVAN
        19447 MAK######
       305434 PRODUC?
        12741 SYNTHES?
L38       145 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)
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TOTAL FOR ALL FILES
L39        2839 (FRUCTAN OR LEVAN)(5A)(MAK###### OR PRODUC? OR SYNTHES?)

=> s l26 (10a)(l13 or l39)
FILE 'MEDLINE'
L40           9 L14 (10A)(L1 OR L27)

FILE 'SCISEARCH'
L41          11 L15 (10A)(L2 OR L28)

FILE 'LIFESCI'
L42           9 L16 (10A)(L3 OR L29)

FILE 'BIOTECHDS'
L43          12 L17 (10A)(L4 OR L30)

FILE 'BIOSIS'
L44          14 L18 (10A)(L5 OR L31)

FILE 'EMBASE'
L45          10 L19 (10A)(L6 OR L32)

FILE 'HCAPLUS'
L46          27 L20 (10A)(L7 OR L33)

FILE 'NTIS'
L47           0 L21 (10A)(L8 OR L34)

FILE 'ESBIOBASE'
L48          11 L22 (10A)(L9 OR L35)

FILE 'BIOTECHNO'
L49           4 L23 (10A)(L10 OR L36)

FILE 'WPIDS'
L50           6 L24 (10A)(L11 OR L37)

FILE 'FSTA'
L51          13 L25 (10A)(L12 OR L38)

TOTAL FOR ALL FILES
L52         126 L26 (10A)(L13 OR L39)

=> s l52 not 2002-2006/py
FILE 'MEDLINE'
       2948806 2002-2006/PY
                 (20020000-20069999/PY)
L53           1 L40 NOT 2002-2006/PY

FILE 'SCISEARCH'
       5453896 2002-2006/PY
                 (20020000-20069999/PY)
L54           3 L41 NOT 2002-2006/PY

FILE 'LIFESCI'
        525768 2002-2006/PY
L55           3 L42 NOT 2002-2006/PY

FILE 'BIOTECHDS'
        127084 2002-2006/PY
L56           4 L43 NOT 2002-2006/PY

FILE 'BIOSIS'
       2657605 2002-2006/PY
L57           4 L44 NOT 2002-2006/PY
```

```
FILE 'EMBASE'
      2581323 2002-2006/PY
L58           3 L45 NOT 2002-2006/PY

FILE 'HCAPLUS'
      5622235 2002-2006/PY
L59           5 L46 NOT 2002-2006/PY

FILE 'NTIS'
        74577 2002-2006/PY
L60           0 L47 NOT 2002-2006/PY

FILE 'ESBIOBASE'
      1534874 2002-2006/PY
L61           3 L48 NOT 2002-2006/PY

FILE 'BIOTECHNO'
       244553 2002-2006/PY
L62           3 L49 NOT 2002-2006/PY

FILE 'WPIDS'
      4806343 2002-2006/PY
L63           0 L50 NOT 2002-2006/PY

FILE 'FSTA'
       127732 2002-2006/PY
L64           3 L51 NOT 2002-2006/PY

TOTAL FOR ALL FILES
L65          32 L52 NOT 2002-2006/PY

=> dup rem l65
PROCESSING COMPLETED FOR L65
L66            9 DUP REM L65 (23 DUPLICATES REMOVED)

=> d tot

L66   ANSWER 1 OF 9  BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI    New enzymes having fructosyltransferase activity (e.g. inulosucrase or
      levansucrase), useful for producing useful levans, inulins and
      fructo-oligosaccharides from sucrose, which are particularly useful as
      prebiotic substrates;
         recombinant protein production via plasmid expression in host cell
         useful for fructo-oligosaccharide inulin-type or levan-type production
AU    VAN GEEL-SCHUTTEN G H; RAHAOUI H; DIJKHUIZEN L; VAN HIJUM S A F T
AN    2002-05167  BIOTECHDS
PI    WO 2001090319 29 Nov 2001

L66  ANSWER 2 OF 9  HCAPLUS  COPYRIGHT 2006 ACS on STN
TI   Sucrose Metabolism and Exopolysaccharide Production in Wheat and Rye
     Sourdoughs by Lactobacillus sanfranciscensis
SO   Journal of Agricultural and Food Chemistry (2001), 49(11), 5194-5200
     CODEN: JAFCAU; ISSN: 0021-8561
AU   Korakli, Maher; Rossmann, Andreas; Gaenzle, Michael G.; Vogel, Rudi F.
AN   2001:795580  HCAPLUS
DN   136:69034

L66  ANSWER 3 OF 9     MEDLINE on STN                    DUPLICATE 1
TI   Purification of a novel fructosyltransferase from
     Lactobacillus reuteri strain 121 and characterization of the
     levan produced.
SO   FEMS microbiology letters, (2001 Dec 18) Vol. 205, No. 2, pp. 323-8.
     Journal code: 7705721. ISSN: 0378-1097.
AU   van Hijum S A; Bonting K; van der Maarel M J; Dijkhuizen L
```

AN 2002003002 MEDLINE

L66 ANSWER 4 OF 9 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
DUPLICATE 2
TI Exopolysaccharide production by Lactobacillus reuteri, involving sucrase type of enzymes.
SO Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent, (2000) Vol. 65, No. 3A, pp. 197-201. print.
AU van Geel-Schutten, G. H. [Reprint author]; van Hijum, S. A. F. T.; Kralj, S.; Rahaoui, H. [Reprint author]; Leer, R. J. [Reprint author]; Dijkhuizen, L.
AN 2001:93723 BIOSIS

L66 ANSWER 5 OF 9 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 3
TI Biochemical and structural characterization of the glucan and fructan exopolysaccharides synthesized by the Lactobacillus reuteri wild-type strain and by mutant strains
SO APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (JUL 1999) Vol. 65, No. 7, pp. 3008-3014.
ISSN: 0099-2240.
AU Van Geel-Schutten G H; Faber E J; Smit E; Bonting K; Smith M R; Ten Brink B; Kamerling J P; Vliegenthart J F G; Dijkhuizen L (Reprint)
AN 1999:513373 SCISEARCH

L66 ANSWER 6 OF 9 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI Biochemical and structural characterization of the glucan and fructan exopolysaccharides synthesized by the Lactobacillus reuteri wild-type strain and by mutant strains; polysaccharide production
SO Appl.Environ.Microbiol.; (1999) 65, 7, 3008-14
CODEN: AEMIDF ISSN: 0099-2240
AU van Geel-Schutten G H; Faber E J; Smit E; Bonting K; Smith M R; ten Brink B; Kamerling J P; Vliegenthart J F G; *Dijkhuizen L
AN 1999-10619 BIOTECHDS

L66 ANSWER 7 OF 9 FSTA COPYRIGHT 2006 IFIS on STN
TI Role of palm wine yeasts and bacteria in palm wine aroma.
SO Journal of Food Science and Technology, India, (1999), 36 (4) 301-304, 13 ref.
ISSN: 0022-1155
AU Uzochukwu, S.; Balogh, E.; Tucknot, O. G.; Lewis, M. J.; Ngoddy, P. O.
AN 1999(12):H2437 FSTA

L66 ANSWER 8 OF 9 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 4
TI Screening and characterization of Lactobacillus strains producing large amounts of exopolysaccharides
SO APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (DEC 1998) Vol. 50, No. 6, pp. 697-703.
ISSN: 0175-7598.
AU van Geel-Schutten G H; Flesch F; ten Brink B; Smith M R; Dijkhuizen L (Reprint)
AN 1999:35388 SCISEARCH

L66 ANSWER 9 OF 9 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI Screening and characterization of Lactobacillus strains producing large amounts of exopolysaccharides; the effect of the substrate used on glucan and fructan production by Lactobacillus reuteri
SO Appl.Microbiol.Biotechnol.; (1998) 50, 6, 697-703
CODEN: EJABDD ISSN: 0175-7598
AU van Geel-Schutten G H; Flesch F; ten Brink B; Smith M R; *Dijkhuizen L
AN 1999-06335 BIOTECHDS

```
=> s l26 and (l13 or l39)
FILE 'MEDLINE'
L67          17 L14 AND (L1 OR L27)

FILE 'SCISEARCH'
L68          28 L15 AND (L2 OR L28)

FILE 'LIFESCI'
L69          17 L16 AND (L3 OR L29)

FILE 'BIOTECHDS'
L70          18 L17 AND (L4 OR L30)

FILE 'BIOSIS'
L71          29 L18 AND (L5 OR L31)

FILE 'EMBASE'
L72          22 L19 AND (L6 OR L32)

FILE 'HCAPLUS'
L73          43 L20 AND (L7 OR L33)

FILE 'NTIS'
L74           0 L21 AND (L8 OR L34)

FILE 'ESBIOBASE'
L75          17 L22 AND (L9 OR L35)

FILE 'BIOTECHNO'
L76           9 L23 AND (L10 OR L36)

FILE 'WPIDS'
L77          14 L24 AND (L11 OR L37)

FILE 'FSTA'
L78          18 L25 AND (L12 OR L38)

TOTAL FOR ALL FILES
L79         232 L26 AND (L13 OR L39)

=> s l79 not 2002-2006/py
FILE 'MEDLINE'
       2948806 2002-2006/PY
                 (20020000-20069999/PY)
L80           2 L67 NOT 2002-2006/PY

FILE 'SCISEARCH'
       5453896 2002-2006/PY
                 (20020000-20069999/PY)
L81           6 L68 NOT 2002-2006/PY

FILE 'LIFESCI'
        525768 2002-2006/PY
L82           7 L69 NOT 2002-2006/PY

FILE 'BIOTECHDS'
        127084 2002-2006/PY
L83           8 L70 NOT 2002-2006/PY

FILE 'BIOSIS'
       2657605 2002-2006/PY
L84           9 L71 NOT 2002-2006/PY
```

```
FILE 'EMBASE'
      2581323 2002-2006/PY
L85           8 L72 NOT 2002-2006/PY

FILE 'HCAPLUS'
       5622235 2002-2006/PY
L86           13 L73 NOT 2002-2006/PY

FILE 'NTIS'
          74577 2002-2006/PY
L87            0 L74 NOT 2002-2006/PY

FILE 'ESBIOBASE'
       1534874 2002-2006/PY
L88            5 L75 NOT 2002-2006/PY

FILE 'BIOTECHNO'
        244553 2002-2006/PY
L89            7 L76 NOT 2002-2006/PY

FILE 'WPIDS'
       4806343 2002-2006/PY
L90            7 L77 NOT 2002-2006/PY

FILE 'FSTA'
        127732 2002-2006/PY
L91            4 L78 NOT 2002-2006/PY

TOTAL FOR ALL FILES
L92           76 L79 NOT 2002-2006/PY

=> dup rem l92
PROCESSING COMPLETED FOR L92
L93           34 DUP REM L92 (42 DUPLICATES REMOVED)

=> d tot

L93   ANSWER 1 OF 34  BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI    New enzymes having fructosyltransferase activity (e.g.
      inulosucrase or levansucrase), useful for producing useful
      levans, inulins and fructo-oligosaccharides from sucrose, which are
      particularly useful as prebiotic substrates;
         recombinant protein production via plasmid expression in host cell
         useful for fructo-oligosaccharide inulin-type or levan-type
         production
AU    VAN GEEL-SCHUTTEN G H; RAHAOUI H; DIJKHUIZEN L; VAN HIJUM S A F T
AN    2002-05167  BIOTECHDS
PI    WO 2001090319 29 Nov 2001

L93  ANSWER 2 OF 34  HCAPLUS  COPYRIGHT 2006 ACS on STN
TI   Sucrose Metabolism and Exopolysaccharide Production in Wheat and Rye
     Sourdoughs by Lactobacillus sanfranciscensis
SO   Journal of Agricultural and Food Chemistry (2001), 49(11), 5194-5200
     CODEN: JAFCAU; ISSN: 0021-8561
AU   Korakli, Maher; Rossmann, Andreas; Gaenzle, Michael G.; Vogel, Rudi F.
AN   2001:795580  HCAPLUS
DN   136:69034

L93  ANSWER 3 OF 34  SCISEARCH  COPYRIGHT (c) 2006 The Thomson Corporation  on
     STN                                                  DUPLICATE 1
TI   Homopolysaccharides from lactic acid bacteria
SO   INTERNATIONAL DAIRY JOURNAL, (2001) Vol. 11, No. 9, Sp. iss. SI, pp.
     675-685.
     ISSN: 0958-6946.
AU   Monsan P (Reprint); Bozonnet S; Albenne C; Joucla G; Willemot R M;
```

Remaud-Simeon M
AN 2001:849829 SCISEARCH

L93 ANSWER 4 OF 34 MEDLINE on STN DUPLICATE 2
TI Purification of a novel fructosyltransferase from Lactobacillus reuteri strain 121 and characterization of the levan produced.
SO FEMS microbiology letters, (2001 Dec 18) Vol. 205, No. 2, pp. 323-8. Journal code: 7705721. ISSN: 0378-1097.
AU van Hijum S A; Bonting K; van der Maarel M J; Dijkhuizen L
AN 2002003002 MEDLINE

L93 ANSWER 5 OF 34 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI Molecular structure of the Lactobacillus plantarum sucrose utilization locus: Comparison with Pediococcus pentosaceus
SO MOLECULAR BIOLOGY, (JAN-FEB 2001) Vol. 35, No. 1, pp. 15-22. ISSN: 0026-8933.
AU Naumoff D G (Reprint); Livshits V A
AN 2001:245117 SCISEARCH

L93 ANSWER 6 OF 34 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 3
TI Exopolysaccharide production by Lactobacillus reuteri, involving sucrase type of enzymes.
SO Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent, (2000) Vol. 65, No. 3A, pp. 197-201. print.
AU van Geel-Schutten, G. H. [Reprint author]; van Hijum, S. A. F. T.; Kralj, S.; Rahaoui, H. [Reprint author]; Leer, R. J. [Reprint author]; Dijkhuizen, L.
AN 2001:93723 BIOSIS

L93 ANSWER 7 OF 34 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 4
TI Biochemical and structural characterization of the glucan and fructan exopolysaccharides synthesized by the Lactobacillus reuteri wild-type strain and by mutant strains
SO APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (JUL 1999) Vol. 65, No. 7, pp. 3008-3014. ISSN: 0099-2240.
AU Van Geel-Schutten G H; Faber E J; Smit E; Bonting K; Smith M R; Ten Brink B; Kamerling J P; Vliegenthart J F G; Dijkhuizen L (Reprint)
AN 1999:513373 SCISEARCH

L93 ANSWER 8 OF 34 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI Biochemical and structural characterization of the glucan and fructan exopolysaccharides synthesized by the Lactobacillus reuteri wild-type strain and by mutant strains; polysaccharide production
SO Appl.Environ.Microbiol.; (1999) 65, 7, 3008-14 CODEN: AEMIDF ISSN: 0099-2240
AU van Geel-Schutten G H; Faber E J; Smit E; Bonting K; Smith M R; ten Brink B; Kamerling J P; Vliegenthart J F G; *Dijkhuizen L
AN 1999-10619 BIOTECHDS

L93 ANSWER 9 OF 34 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN DUPLICATE 5
TI Purification and immobilization of fructosyl transferase for production of fructo-oligosaccharide(s) from sucrose.
SO Indian Journal of Experimental Biology, (1999) Vol. 37, No. 8, pp. 830-834. .
Refs: 16
ISSN: 0019-5189 CODEN: IJEBA6
AU Patil V.B.; Patil N.B.

AN 1999274169 EMBASE

L93 ANSWER 10 OF 34 FSTA COPYRIGHT 2006 IFIS on STN
TI Role of palm wine yeasts and bacteria in palm wine aroma.
SO Journal of Food Science and Technology, India, (1999), 36 (4) 301-304, 13 ref.
ISSN: 0022-1155
AU Uzochukwu, S.; Balogh, E.; Tucknot, O. G.; Lewis, M. J.; Ngoddy, P. O.
AN 1999(12):H2437 FSTA

L93 ANSWER 11 OF 34 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN DUPLICATE 6
TI In vitro digestibility and fermentability of levan and its hypocholesterolemic effects in rats.
SO Journal of Nutritional Biochemistry, (1999) Vol. 10, No. 1, pp. 13-18. .
Refs: 35
ISSN: 0955-2863 CODEN: JNBIEL
AU Yamamoto Y.; Takahashi Y.; Kawano M.; Iizuka M.; Matsumoto T.; Saeki S.; Yamaguchi H.
AN 1999050080 EMBASE

L93 ANSWER 12 OF 34 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 7
TI Screening and characterization of Lactobacillus strains producing large amounts of exopolysaccharides
SO APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (DEC 1998) Vol. 50, No. 6, pp. 697-703.
ISSN: 0175-7598.
AU van Geel-Schutten G H; Flesch F; ten Brink B; Smith M R; Dijkhuizen L (Reprint)
AN 1999:35388 SCISEARCH

L93 ANSWER 13 OF 34 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI Screening and characterization of Lactobacillus strains producing large amounts of exopolysaccharides;
the effect of the substrate used on glucan and fructan production by Lactobacillus reuteri
SO Appl.Microbiol.Biotechnol.; (1998) 50, 6, 697-703
CODEN: EJABDD ISSN: 0175-7598
AU van Geel-Schutten G H; Flesch F; ten Brink B; Smith M R; *Dijkhuizen L
AN 1999-06335 BIOTECHDS

L93 ANSWER 14 OF 34 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN DUPLICATE 8
TI Enhanced production of fructosyltransferase and glucosyltransferase by substrate-feeding cultures of Aureobasidium pullulans.
SO Journal of Fermentation and Bioengineering, (1997) Vol. 84, No. 3, pp. 261-263. .
Refs: 18
ISSN: 0922-338X CODEN: JFBIEX
AU Jong Won Yun; Dong Hyun Kim; Seung Koo Song
AN 97328535 EMBASE

L93 ANSWER 15 OF 34 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 9
TI Purification and substrate specificity of an extracellular fructanhydrolase from Lactobacillus paracasei ssp paracasei P 4134
SO NEW PHYTOLOGIST, (MAY 1997) Vol. 136, No. 1, pp. 89-96.
ISSN: 0028-646X.
AU Muller M (Reprint); Seyfarth W
AN 1997:447962 SCISEARCH

L93 ANSWER 16 OF 34 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

TI Liquid food materials which retain original flavour - contain fructo-oligosaccharide(s), and is obtd. using agricultural production containing sucrose
PI JP 08173109 A 19960709 (199637)* JA 15[6] A23L002-02
JP 2852206 B2 19990127 (199909) JA 15 A23L002-02
IN BABA N; FUJII H; FURUTA M; MORIYAMA H; OTA N; SUENAGA H; YAMAGUCHI T; YAMASHITA S

L93 ANSWER 17 OF 34 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI Production of fructosyl-trehalose;
using Aspergillus sydowii producing fructosyltransferase
AN 1995-01493 BIOTECHDS
PI JP 06284894 11 Oct 1994

L93 ANSWER 18 OF 34 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI New oligosaccharide sweetener and its production;
by using Rahnella aquatilis levansucrase
AN 1992-09317 BIOTECHDS
PI JP 04103593 6 Apr 1992

L93 ANSWER 19 OF 34 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

TI Powder with a high lacto:sucrose content - prepared by enzyme treatment of solution containing sucrose and lactose, removing other saccharide, and spray drying
PI EP 447125 A 19910918 (199138)* EN 20[2]
R: DE FR GB NL
AU 9172731 A 19910912 (199144) EN
US 5130239 A 19920714 (199231) EN 12[1] C12P019-18
JP 04281795 A 19921007 (199247) JA 12[2] C12P019-18
AU 641732 B 19930930 (199347) EN C12P019-18
US 5296473 A 19940322 (199411) EN 12[2] A61K031-70
EP 447125 B1 19950719 (199533) EN 21[2] C12P019-18
R: DE FR GB NL
DE 69111271 E 19950824 (199539) DE C12P019-18
JP 10057092 A 19980303 (199819)# JA 11[2] C12P019-18
JP 2000041694 A 20000215 (200019) JA 10 C12P019-18
KR 161531 B1 19981116 (200030) KO C12P019-00
JP 3134229 B2 20010213 (200111) JA 12 C12P019-18
IN FUJITA K; FUJITA T; HARA K; MIYAKE T; SAKAI S; TSUNETOMI Y; YAMASHITA M

L93 ANSWER 20 OF 34 MEDLINE on STN
TI The influence of sucralose on bacterial metabolism.
SO Journal of dental research, (1990 Aug) Vol. 69, No. 8, pp. 1480-4.
Journal code: 0354343. ISSN: 0022-0345.
AU Young D A; Bowen W H
AN 90347112 MEDLINE

L93 ANSWER 21 OF 34 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI Transformed lactic acid bacterium produced by electroporation;
producing a silage probiotic compound
AN 1989-06482 BIOTECHDS
PI WO 8901970 9 Mar 1989

L93 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 2006 ACS on STN
TI Lactose-based oligosaccharides
SO Kemia - Kemi (1988), 15(3), 218-22
CODEN: KMKMAA; ISSN: 0355-1628
AU Hartikainen, Marianne; Harju, Matti; Heikonen, Matti; Linko, Pekka
AN 1988:471892 HCAPLUS
DN 109:71892

L93 ANSWER 23 OF 34 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

TI Lactobacillus bifidus increase accelerators, useful for foods - containing saccharide(s), aldo-pyranose or sugar alcohol bonded with 1-3 molecules of fructose
PI JP 62207286 A 19870911 (198742)* JA 10[0]
IN HIDAKA H; HIRAYAMA M; YAMAMOTO T

L93 ANSWER 24 OF 34 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

TI Culture liquor containing fructo-oligosaccharide and beta-1,3-1,6-glucane - prepared by culturing yeast of aureobasidium in liquid culture medium containing saccharose rice bran vitamin(s) C and E
PI JP 61146192 A 19860703 (198633)* JA 8
JP 05004063 B 19930119 (199306) JA 9 A23L002-00
IN SHINOHARA S

L93 ANSWER 25 OF 34 LIFESCI COPYRIGHT 2006 CSA on STN DUPLICATE 11
TI Selectivity and efficiency of utilization of galactosyl-oligosaccharides by bifidobacteria.
SO CHEM. PHARM. BULL. (TOKYO)., (1985) vol. 33, no. 2, pp. 710-714.
AU Minami, Y.; Yazawa, K.; Nakamura, K.; Tamura, Z.
AN 85:10500 LIFESCI

L93 ANSWER 26 OF 34 HCAPLUS COPYRIGHT 2006 ACS on STN
TI Effects of sodium and potassium ions on the characteristics of oral bacteria
SO Recent Adv. Streptococci Streptococcal Dis., Proc. Lancefield Int. Symp. Streptococci Streptococcal Dis., 9th (1985), Meeting Date 1984, 105-6. Editor(s): Kimura, Yoshitami; Kotani, Shozo; Shiokawa, Yuichi. Publisher: Reedbooks, Bracknell, UK.
CODEN: 55BSAN
AU Knox, K. W.; Forester, H.; Jacques, N. A.; Wicken, A. J.; Fitzgerald, R. J.
AN 1986:438870 HCAPLUS
DN 105:38870

L93 ANSWER 27 OF 34 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI A compound which accelerates the growth of Lactobacillus bifidus;
preparation from sucrose and fructose using fructosyl-transferase; use in treatment of intestinal disorder in human baby
AN 1984-02631 BIOTECHDS
PI JP 58201980 25 Nov 1983

L93 ANSWER 28 OF 34 LIFESCI COPYRIGHT 2006 CSA on STN DUPLICATE 13
TI Selectivity of utilization of galactosyl-oligosaccharides by Bifidobacteria.
SO CHEM. PHARM. BULL. (TOKYO)., (1983) vol. 31, no. 5, pp. 1688-1691.
AU Minami, Y.; Yazawa, K.; Tamura, Z.; Tanaka, T.; Yamamoto, T.
AN 83:56498 LIFESCI

L93 ANSWER 29 OF 34 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

TI Microbial preparation of water soluble polysaccharide - by cultivating microorganism of spore-forming lactic acid bacteria in presence of sucrose
PI JP 55037189 A 19800315 (198017)* JA
JP 60044918 B 19851005 (198544) JA
IN AMAMIYA Y; NAKAYAMA D

L93 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 2006 ACS on STN
TI Polysaccharide formation by spore-bearing lactic acid

bacteria
SO Journal of General and Applied Microbiology (1980), 26(2), 159-66
CODEN: JGAMA9; ISSN: 0022-1260
AU Amemiya, Yumiko; Nakayama, Ooki
AN 1981:530938 HCAPLUS
DN 95:130938

L93 ANSWER 31 OF 34 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI LACTOBACILLUS-HORDNIAE NEW-SPECIES FROM THE LEAFHOPPER HORDNIA-CIRCELLATA.
SO International Journal of Systematic Bacteriology, (1977) Vol. 27, No. 4, pp. 362-370.
CODEN: IJSBA8. ISSN: 0020-7713.
AU LATORRE-GUZMAN B A [Reprint author]; KADO C I; KUNKEE R E
AN 1978:144213 BIOSIS

L93 ANSWER 32 OF 34 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN
TI Effects of sodium trimetaphosphate supplementation of a high sucrose diet on the microbial and biochemical composition of four day plaque and on urine calcium and phosphorus levels.
SO Journal of Dental Research, (1976) Vol. 55, No. 5, pp. 787-796. .
CODEN: JDREAF
AU Dennis D.A.; Gawronski T.H.; Cressey D.E.; Folke L.E.A.
AN 77173020 EMBASE

L93 ANSWER 33 OF 34 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN
TI Variations in microbial and biochemical components of four day plaque during a four week controlled diet period.
SO Journal of Dental Research, (1975) Vol. 54, No. 4, pp. 716-722. .
CODEN: JDREAF
AU Dennis D.A.; Gawronski T.H.; Sudo S.Z.; et al.
AN 76147248 EMBASE

L93 ANSWER 34 OF 34 HCAPLUS COPYRIGHT 2006 ACS on STN
TI Contribution of plaque polysaccharides to growth of cariogenic microorganisms
SO Archives of Oral Biology (1971), 16(8), 855-62
CODEN: AOBIAR; ISSN: 0003-9969
AU Parker, R. B.; Creamer, H. R.
AN 1971:506411 HCAPLUS
DN 75:106411

=> d ab 3,4,9,16,22,27,29-31

L93 ANSWER 3 OF 34 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 1
AB In addition to heteropolysaccharides of complex structure, lactic bacteria produce a variety of homopolysaccharides containing only either D-fructose or D-glucose. These fructans and glucans have a common feature in being synthesized by extracellular transglycosylases (glycansucrases) using sucrose as glycosyl donor. The energy of the osidic bond of sucrose enables the efficient transfer of a D-fructosyl Or D-glucosyl residue via the formation of a covalent glycosyl-enzyme intermediate. In addition to the synthesis of high molecular weight homopolysaccharides, glycansucrases generally catalyse the synthesis of low molecular weight oligosaccharides or glycoconjugates when efficient acceptors, like maltose, are added to the reaction medium. While the enzymatic synthesis of fructans (levan and inulin) is poorly documented at the molecular level, the field of Streptococcus and Leuconostoc glucansucrases (glucosyltransferases and dextransucrases) has been well studied, both at the mechanistic and gene structure levels. The nutritional applications

of the corresponding polysaccharides and oligosaccharides account for this increasing interest. (C) 2001 Elsevier Science Ltd. All rights reserved.

L93 ANSWER 4 OF 34 MEDLINE on STN DUPLICATE 2
AB Fructosyltransferase (FTF) enzymes have been characterized from various Gram-positive bacteria, but not from Lactobacillus sp. In a screening of 182 lactobacilli for polysaccharide production only one strain, Lactobacillus reuteri strain 121, was found to produce a fructan being a levan. Here we report the first-time identification and biochemical characterization of a Lactobacillus FTF enzyme. When incubated with sucrose the enzyme produced a levan that is identical to that produced by Lb. reuteri strain 121 cells.

L93 ANSWER 9 OF 34 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN DUPLICATE 5
AB A protocol for commercial production of a non digestible sweetner, fructo-oligosaccharide(s) from sucrose has been developed. The extracellular enzyme fructosyl transferase was isolated aged purified from Aureobasidium pullulans. The enzyme was covalently immobilized on CNBr activated agarose for its economical viability and for continuous use.

L93 ANSWER 16 OF 34 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
AB JP 08173109 A UPAB: 20050512
Preparation of liquid food materials containing fructooligosaccharides uses an agricultural production containing sucrose or its precursor as raw material. An enzyme agent containing a fructosyl transferase is acted on the raw material to form fructooligosaccharides comprising sucrose bonded with 102 fructose molecules. Pref. the final fructooligosaccharides to sucrose ratio is upto 1.0. Pref. the transferase is immobilised onto crosslinked porous silica beads.
Also claimed is pref. of liquid food materials containing gluconic acid using an agricultural prod. containing glucose or its precursor as raw material. An enzyme agent containing a glucose oxidase and a catalase is acted on the raw material to form gluconic acid.
Also claimed to preparation of liquid food materials containing gluconic acid and fructooligosaccharides using an agricultural production containing glucose or a glucose precursor and sucrose or a sucrose precursor. An enzyme agent containing a glucose oxidase, a catalase and a fructosyl transferase is acted on the raw material.
PREFERRED MATERIALS - Pref. the transferase is obtd. by culture of aspergillus niger IAM2020 in a medium without sucrose. Pref. the raw material is the juice of carrots or the squeezed juice of sugar cane. Pref. the glucose-containing raw material is a squeezed juice of fruits.
ADVANTAGE - The materials have increased sourness and reduced sweetness and activity for growing Lactobacillus bifidus.

L93 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 2006 ACS on STN
AB A review with 31 refs. The lactose of milk and whey is a useful raw material for biotechnol. processes. During the enzymic hydrolysis of lactose, oligosaccharides other than glucose and galactose are formed, either as intermediate products or during a transfer reaction in which the enzyme transfers the glycone group of the substrate to a sugar acceptor. The β-galactosidase from Aspergillus oryzae is often used to produce oligosaccharides from lactose. The main trisaccharide formed is galactosyllactose. Various oligosaccharides can also be produced by the action of a glycosidase on sucrose, polysaccharides or a mixture of different sugars. Fructo-oligosaccharides, for example, are produced through the action of fructosyltransferase on sucrose.
Lactose-based oligosaccharides find particular use in promoting the growth of lactic acid bacteria in the lower parts of the intestine. Oligosaccharides may also be used to alter the phys.

and chemical properties of foods. Thus, the production and properties of oligosaccharides are important in the present research on carbohydrate chemical

L93 ANSWER 27 OF 34 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
AB Fructo-oligosaccharide, composed of 1 mole of sucrose and 1-4 moles of fructose, is prepared using fructosyl-transferase.
The enzyme can be obtained from such microorganisms as Aspergillus, Penicillium, Fusarium, Gloeosporium, Aureobasidium, Saccharomyces, Rhodotorula, Pichia, Hansenula and Candida spp. The microorganism is incubated in a culture medium containing sucrose, peptone, meat extract and inorganic nutrients at 25-30 deg for 24-96 hr, and the enzyme is collected from the culture broth or the mycelia. (I) Accelerates the growth of Lactobacillus bifidus which is known to exist in the intestinal organs of human babies. The microorganism prevents the formation of toxic amines and inhibits the growth of pathogenic bacteria. (5pp)

L93 ANSWER 29 OF 34 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
AB JP 55037189 A UPAB: 20050418
Preparation of polysaccharides comprising water soluble fructan or its hydrolysate comprises cultivating a microorganism belonging to spore-forming lactic acid bacteria having
the optimum growth temperature at medium temps. (≤45 degrees C) and capable of producing water soluble fructan (e.g.
Bacillus laevolacticus M-4, ATCC 23549, B. laevolactcus M-1, ATCC 23493 or B. laevolacticus M-91, FERM-P 544) in a medium containing 1-10 w/v% (pref. 2-4 w/v%) of sucrose as a sole carbon source an, in addition, nitrogen sources, inorganic salts and trace elements at 20-40 degrees C (pref. about 30 degrees C) at pH 4-8 in a settled culture or with slight aeration, producing and accumulating the water soluble polymers solely consisting of fructose having a mol. weight of 20,000,000 alone or together with completely water insoluble (polysaccharides (glucan), if desired hydrolyzing the reamining sol liquid, and purifying the prod.
The water soluble polysaccharides and their hydrolysates exhibit dextran-like properties and are useful as plasma substitute and also exhibit anticancer activities.

L93 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 2006 ACS on STN
AB A small amount of H2O-soluble fructan [9037-90-5] was formed from sucrose by 71 strains of Bacillus laevolacticus and a few strains of Sporolactobacillus inulinus. A gelatinous mass of H2O-insol. glucan [9012-72-0] and fructan was formed from sucrose by several strains of B. laevolacticus. Polysaccharide formation was not observed in such groups of spore-bearing lactic acid bacteria as
Bacillus coagulans, Bacillus racemilacticus, and racemic lactic acid-producing Sporolactobacillus. Aeration was not needed for the formation of either fructan or glucan. The yield of glucan was ≤25% from sucrose and 2% from yeast extract-peptone broth with 8% sucrose. Glucan was solubilized in 0.1N H2SO4 by heating at 100° for 20 min, and the glucan was partially hydrolyzed by dextranase. The mol. wts. of soluble glucan and fructan were 6.4 + 105 and >2 + 107, resp. The antitumor activity of both soluble glucan and fructan against mouse sarcoma 180 was .apprx.60%.

L93 ANSWER 31 OF 34 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
AB A gram-positive, rod-shaped bacterium, originally thought by Auger (1974) to be the agent of Pierce's disease of grapevines, is commonly associated with H. circellata, 1 of the leafhopper vectors of the disease. The bacterium has the following colonial and cellular characteristics: smooth, glistening white, or chalky colonies, 0.4-0.5 mm in diameter with entire margins; gram positive becoming gram variable after 5 days in culture; nonmotile and nonsporeforming; grows from 15-37° C with an optimum of 28-30° C and no growth at 9 or 45° C; optimum growth

occurs at pH 6.5, with growth observed at pH 4.5 and pH 9.0. The bacterium does not survive after 5-7 days of growth and must be maintained on fresh medium. It is rod-shaped (0.6 by 1.5 to 2.0 μm), growing in short chains of 3-4 cells each, and possesses mesosomes and a cell wall of uniform thickness (28-35 nm) that consists of an electron-dense outer layer and an inner layer resembling unit-membrane structure. The organism is a facultative anaerobe which reacts negatively in tests for cytochrome oxidase, catalase, gelatinase, urease, tryptophanase, and nitrate and disulfide reductase activities. No dextran or levan is produced from sucrose. It produces L-(+)-lactic acid but not D-(-)-lactic acid from glucose and sucrose fermentation, acetylmethylcarbinol, or arginine deaminase. Glucose, sucrose, galactose, maltose, fructose, trehalose, salicin, inulin, and cellobiose, but not gluconate, lactose mannose, mannitol, sorbitol, melibiose, or raffinose, were utilized as C sources. Its chromosome has an average guanine-plus-cytosine content of 32.75 mol%. Based on these features, the bacterium appears to be a hitherto unrecognized species of the genus Lactobacillus, for which the name L. hordniae sp. nov. is proposed. The type strain is HC-1 (= ATCC 29071).

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=> fil .bec
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   209.32     211.42

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -1.50      -1.50

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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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3 FILES IN THE FILE LIST

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FILE 'BIOTECHDS'
         34754 WO/PC
         31183 PRY<=2001
                 (PRY<=2001)
        127013 PY=>2002
                 (PY=>2002)
L94           1 L70 AND WO/PC AND PRY<=2001 AND PY=>2002

FILE 'HCAPLUS'
        304990 WO/PC
        692276 PRY<=2001
       5293102 PY=>2002
L95           1 L73 AND WO/PC AND PRY<=2001 AND PY=>2002
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FILE 'WPIDS'
        582349 WO/PC
       1586517 PRY<=2001
       3876154 PY=>2002
                (PY=>2002)
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PROCESSING COMPLETED FOR L97
L98           3 DUP REM L97 (1 DUPLICATE REMOVED)

=> d tot

L98   ANSWER 1 OF 3  BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
TI    Isolated and purified strain of Lactobacillus sanfranciscensis
      for preparation of human or pet food product or cosmetic
      composition, produces levan;
           lactic acid bacterium fermentation for
         levan production useful as a probiotic
AU    VINCENT S; BRANDT M; CAVADINI C; HAMMES W P; NEESER J; WALDBUESSER S
AN    2002-18465  BIOTECHDS
PI    WO 2002050311 27 Jun 2002

L98  ANSWER 2 OF 3  HCAPLUS  COPYRIGHT 2006 ACS on STN
TI   Non-digestible sugar-coated products and process
SO   PCT Int. Appl., 27 pp.
     CODEN: PIXXD2
IN   Miller, Guy W.
AN   2002:832656  HCAPLUS
DN   137:329466
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ----------          ----   --------    --------------------    --------
PI   WO 2002085415        A1    20021031    WO 2002-US12323         20020417 <--
     WO 2002085415        B1    20030912
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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     US 2004091537        A1    20040513    US 2003-686129          20031014 <--

L98  ANSWER 3 OF 3  WPIDS COPYRIGHT 2006       THE THOMSON CORP on STN

TI   New enzymes having fructosyltransferase activity (e.g.
     inulosucrase or levansucrase), useful for producing useful
     levans, inulins and fructo-oligosaccharides from sucrose, which are
     particularly useful as prebiotic substrates
PI   WO 2001090319   A2 20011129 (200215)* EN  54[5]       C12N009-00      <--
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     US 20020127681  A1 20020912 (200262)  EN              C12P019-04      <--
     EP 1283888      A2 20030219 (200321)  EN              C12N015-54      <--
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RO SE SI TR

US 6635460	B1	20031021 (200370)	EN	C12N009-10	<--
US 6730502	B2	20040504 (200430)	EN	C12N009-10	<--
US 20040185537	A1	20040923 (200463)	EN	C12P019-04	<--

IN DIJKHUIZEN L; RAHAOUI H; VAN GEEL-SCHUTTEN G H; VAN HIJUM S A F T

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	19.01	248.79

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.50

STN INTERNATIONAL LOGOFF AT 15:39:44 ON 05 DEC 2006